

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**NICHIA CORPORATION,**

**Plaintiff,**

**V.**

**TCL MULTIMEDIA TECHNOLOGY  
HOLDINGS LIMITED and TTE  
TECHNOLOGY, INC.,**

## Defendants.

**C.A. No. 2:16-cv-875**

## Jury Trial Demanded

## COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Nichia Corporation (“Nichia”), by its undersigned counsel, with knowledge as to its own acts and status, and upon information and belief as to the acts and status of others, for its Complaint against defendants TCL Multimedia Technology Holdings Limited (“TCL”) and TTE Technology, Inc. (“TTE”) (collectively, the “TCL Group”), alleges as follows:

## PRELIMINARY STATEMENT

1. This is an action for patent infringement under the United States patent laws, 35 U.S.C. § 1, *et seq.* The accused products are LED televisions (the “Accused LED Televisions”) -- including, for example, the TCL 55FS3700 55 inch 1080p Roku Smart LED TV (the “55” LED TV”) -- that are imported into the United States, and/or made, used, sold, and/or offered for sale, in the United States, in the State of Texas, and in this judicial district, by the TCL Group. The LED devices in the Accused LED Televisions infringe at least claims 1, 7, 17, and 21 of U.S. Patent No. 8,530,250 (the “250 Patent”), which is owned for all purposes by Plaintiff Nichia.

2. In a previous lawsuit, this Court held that LED devices manufactured by Everlight Electronics Co., Ltd. infringe, among other claims, claims 1, 7, 17, and 21 of the '250 Patent. As set forth in detail below, the Accused LED Televisions incorporate LED devices that, insofar as relevant to the claim limitations, have the same features, and are manufactured by the same process, as Everlight LED products previously found to infringe the '250 Patent. By this lawsuit, Nichia seeks relief for the TCL Group's past and ongoing infringement of Nichia's '250 Patent by virtue of the TCL Group's incorporation of infringing LEDs into its products, including the Accused LED Televisions.

### **THE PARTIES**

3. Plaintiff Nichia Corporation is a corporation organized and existing under the laws of Japan, with its principal place of business at 491 Oka, Kaminaka-Cho, Anan-Shi, Tokushima 774-8601, Japan.

4. Defendant TCL is a Cayman Islands corporation with its principal place of business at 13/F, TCL Tower, 8 Tai Chung Road, Tsuen Wan, New Territories, Hong Kong. TCL and its subsidiaries, including TTE, are part of one of the largest television manufacturing and distribution groups in the world. TCL televisions, including the Accused LED Televisions, are sold throughout the United States and in this judicial district.

5. Defendant TTE is a Delaware corporation with its place of business at 2455 Anselmo Drive, Corona, California 92879. TTE is a wholly-owned subsidiary of TCL. TTE sells television products, including the Accused LED Televisions, throughout the United States and in this judicial district.

6. The TCL Group is one of the leading members of the global TV industry, and engages in research, development, manufacture, and distribution of consumer electronic

products, including the Accused LED Televisions. The TCL Group has sold over one million televisions in the United States, and has experienced explosive growth in the United States market. TCL Group products, including the Accused LED Televisions, are sold at major retailers throughout the United States, including Costco, Walmart, Sam's Club, and Amazon.com. The TCL Group participates in trade shows in the United States, including a March 2015 trade show in Texas.

7. The TCL Group maintains a North American Business Center headquartered in Corona, California. From its Corona, California facility, the TCL Group provides sales, marketing, technical/regulatory, supply-chain, and aftersales support to retailers and consumers.

8. The TCL Group has offered, and continues to offer, LED televisions for sale through their website [www.tclusa.com](http://www.tclusa.com) (directing purchasers to specific retailers, including retailers in this district). The televisions that the TCL Group offers through its website include, for example, the accused 55" LED TV. The Accused LED Televisions also can be purchased in this district online, for example, through Amazon.com and Sam's Club.

### **JURISDICTION AND VENUE**

9. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

10. TTE and TCL are subject to personal jurisdiction in this judicial district because TTE and TCL are present within, have minimum contacts with, and regularly conduct business in the State of Texas and the Eastern District of Texas.

11. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391 and 1400(b).

12. Among other things, the TCL Group has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; has solicited

business in, transacted business within, and has attempted to derive financial benefit from residents of the State of Texas and this judicial district. Nichia's cause of action arises directly from the TCL Group's business contacts and other activities in the State of Texas and in this judicial district.

13. In addition, the TCL Group, directly and/or through its agents and intermediaries, have placed the Accused LED Televisions into the stream of commerce throughout the United States through established distribution channels, with the expectation and/or knowledge that they will be offered for sale, sold, and/or used in the State of Texas and in this judicial district.

#### **THE PATENT-IN-SUIT**

14. U.S. Patent No. 8,530,250, entitled "Light Emitting Device, Resin Package, Resin-Molded Body, and Methods for Manufacturing Light-Emitting Device, Resin Package and Resin-Molded Body," was duly and lawfully issued by the U.S. Patent and Trademark Office on September 10, 2013. A true and correct copy of the '250 Patent is attached as Exhibit A.

15. The '250 Patent lists Hirofumi Ichikawa, Masaki Hayashi, Shimpei Sasaoka, and Tomohide Miki as inventors.

16. Nichia is the owner of the '250 Patent by valid assignment from the inventors. Nichia owns all rights, title, and interest in the '250 Patent, including the right to sue for and recover all past, present, and future damages for infringement of the '250 Patent.

17. The Abstract of the '250 Patent provides as follows:

Provided is a simple and low-cost method for manufacturing, in a short time, many light emitting devices wherein adhesiveness between a leadframe and a thermosetting resin composition is high. The method for manufacturing the light emitting device having a resin package (20) wherein the optical reflectivity at a wavelength of 350-800 nm after thermal curing is 70% or more and a resin section (25) and a lead (22) are formed on substantially a same surface on an outer surface (20 *b*) has: a step of sandwiching a leadframe (21) provided with a notched section (21 *a*) by an upper molding die (61) and a lower molding die

(62); a step of transfer-molding a thermosetting resin (23) containing a light-reflecting substance (26), in a molding die (60) sandwiched by the upper molding die (61) and the lower molding die (62) and forming a resin-molded body (24) on the leadframe (21); and a step of cutting the resin-molded body (24) and the leadframe (21) along the notched section (21 *a*).

### **THE EVERLIGHT LITIGATION**

18. In 2013, Nichia filed an action for patent infringement in this Court against Everlight Electronics Co., Ltd., Everlight Americas, Inc., and others (collectively, “Everlight”) styled *Nichia Corp. v. Everlight Elecs. Co., Ltd. et al.*, No. 2:13-cv-702-JRG (E.D. Tex.), *appeals docketed*, Nos. 16-1585, 16-1618 (Fed. Cir.) (the “Everlight Litigation”). In the Everlight Litigation, Nichia accused, *inter alia*, Everlight’s XI3030 and XI3535 series products of infringing claims 1, 7, 17, and 21 of the ’250 Patent.

19. The Everlight Litigation was tried in this Court from May 11 to 13, 2015, before the Honorable J. Rodney Gilstrap. The Court issued a Memorandum and Opinion in the Everlight Litigation on January 25, 2016 (the “Memorandum”), a true and correct copy of which is attached hereto as Exhibit B. Among other things, the Court found that the accused products infringe the asserted claims of the ’250 Patent, and that Everlight had not shown the asserted claims to be invalid.

20. In the Everlight Litigation, the Court construed limitations in claims 1, 17, 19, and 21 of the ’250 Patent as follows:

i. **The Preambles of Claims 1 and 17 are Claim Limitations**

[FF38] In its Claim Construction Memorandum Opinion and Order (Dkt. No. 79), this Court determined that the preambles of claims 1 and 17 are claim limitations. (Claim Construction Order, Dkt. No. 79, at 53-54.) “[T]he entirety of the ’250 patent reveals that the preamble language relating to ‘light emitting device’ does not state a purpose or an intended use of the invention, but rather discloses a fundamental characteristic of the claimed invention that is properly construed as a limitation of the claim itself.” (Claim Construction Order, at 54 (“[T]he preamble language gives life, meaning and vitality to the claims by

making it clear that claim 17 is directed to a light emitting device and claim 1 is directed to a method for manufacturing a light emitting device.”.)

ii. “Lead”

[FF39] Claims 1, 17, 19, and 21 of the ’250 patent include the term “lead.” This Court construed “lead” as “the portion of the device that conducts electricity.” (Claim Construction Order, at 57.) Although a lead must conduct electricity, “this does not foreclose the recited ‘lead’ from performing other functions in addition to conducting electricity.” (Id.)

iii. “A Portion of the Resin Part is Disposed Over a Portion of the Plating on the Upper Surface of the at Least One Lead”

[FF40] Claim 17 of the ’250 patent requires that “a portion of the resin part is disposed over a portion of the plating on the upper surface of the at least one lead,” which was construed to mean “a portion of the resin part is located over a portion of the plating on the upper surface of the at least one lead.” (Claim Construction Order, at 64.) This Court rejected Defendants’ contention that claim 17 “allows for all of the resin part to be disposed over all of the plating on the upper surface of the at least one lead.” (Id. at 63-64 (“A portion is not ‘all’ as Defendants contend.”).)

iv. “Notch”

[FF41] Claim 1 of the ’250 patent requires providing a lead frame having at least one “notch.” This Court construed the term “notch” to mean “an opening that penetrates the lead frame.” (Claim Construction Order, at 66-67.)

v. “Cutting the Resin-Molded Body and the Plated Lead Frame Along the at Least One Notch”

[FF42] Claim 1 recites the step of “cutting the resin-molded body and the plated lead frame along the at least one notch,” which this Court determined should be given its plain and ordinary meaning. (Claim Construction Order, at 67-69.)

vi. “Planar”

[FF43] Claims 1 and 17 require that an outer surface of at least one lead and an outer surface of the resin part are “planar.” This Court construed “planar” to mean “in a substantially same plane.” (Claim Construction Order, at 69-72.) The construction of “planar” does not require that the “leads and outer surface of the resin package to be perfectly flat.” (Claim Construction Order, at 71.)

Memorandum at 16-18.

21. In the Everlight Litigation, the Court found that the XI3030 and XI3535 series products contain all of the limitations set forth in claims 1, 7, 17, and 21 of the '250 Patent. Specifically, the Court held as follows:

**[FF45]** The Court finds that all of the claim limitations of Claim 1 of the '250 patent exist in and are met by the accused XI3030 and XI3535 series products. . . .

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**[FF67]** The Court finds that all of the claim limitations of Claim 7 of the '250 patent exist in and are met by the accused XI3030 and XI3535 series products. . . .

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**[FF71]** The Court finds that all of the claim limitations of Claim 17 of the '250 patent exist in and are met by the accused XI3030 and XI3535 series products. . . .

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**[FF80]** The Court finds that all of the claim limitations of Claim 21 of the '250 patent exist in and are met by the accused XI3030 and XI3535 series products. . . .

Memorandum at 18-26.

22. In the Everlight Litigation, the Court also found that the “Nichia products covered by the '250 patent (i) have received industry recognition, (ii) satisfy a longstanding but unmet need, and (iii) have achieved commercial success,” and that “[t]he features of the products in [Nichia’s] 757 series are included in the asserted claims of the '250 patent, and these features in turn have contributed to the products’ commercial success.” Memorandum at 50. Specifically, the Court found:

**[FF175]** A 2013 article in *LEDinside* publication reported on industry praise and recognition for Nichia’s 757 product, stating that Nichia’s 757 series “ignited” the “expansion trend in that category.” (PTX829 (“2013 Review EMC Production Expansion Could Mean Trouble for PCT”).)

**[FF176]** Moreover, the industry had experienced a long-felt but unmet need for an alternative to incandescent lighting technology. Incandescent lights consume

large amounts of energy for a given output of light, and the alternative that followed – fluorescent lighting –contains toxic components. With the advent of Nichia’s 757 series and related products, “there is the availability of low-cost devices that emit a significant amount of light that can be used in light s and emit a pleasant, low-cost light.” [ ]

**[FF177]** Between 2010 and 2013, Nichia’s sales of the products that practice the ’250 patent increased from three percent of Nichia’s total sales volume, to 27 percent. In 2013, Nichia sold over 13.9 billion units, with revenues of \$1.7 billion. [ ] The 757 series products themselves showed a similar increase, from 25 million units in 2011 to 2.5 billion units in 2013. In the eight months from January to August 2014, Nichia sold nearly 2.7 billion units of the products in the 757 series. [ ]

**[FF178]** Although the products in Nichia’s 757 series are advertised and marketed as having an “EMC” (thermosetting resin-type) package, the overall structure and design of the package is important to consumers. The products in the 757 series are brighter, they have a long life, they are reliable, they have a low cost, and they can be fabricated quickly to meet customer demand. [ ] The brightness relates to (i) the resin, (ii) the plated lead frame, and (iii) the fact that the design allows for thin package walls, which allows for better emission of light (for example, by mounting a larger ship). [ ] The long life and reliability are attributable to the thermosetting resin (which does not discolor in the presence of light), a heat-resistant package design, and a notch in the lead frame that contributes to the package’s adhesiveness. In addition, by plating the lead frame before molding, Nichia avoids possible contamination to bonding sites that can reduce the reliability of the bonding process. [ ] The design and manufacturing process contribute to low cost by allowing Nichia to make many more packages at once. Prior industry practice was to make about 100 packages per lead frame; Nichia makes approximately 2,400 packages per lead frame of its 157 product, and 1,200 packages per lead frame of its 757 product. [ ] Finally, the advanced manufacturing process allows Nichia to respond quickly to customer orders. [ ]

Memorandum at 48-50.

23. In the Everlight Litigation, the Court concluded that Everlight’s XI3030 and XI3535 series products infringe claims 17 and 21 of the ’250 Patent under 35 U.S.C. § 271(a), and that these products infringe claims 1 and 7 of the ’250 Patent under 35 U.S.C. § 271(g). *See* Memorandum at 114-15.



### **THE TCL GROUP'S INFRINGING CONDUCT**

24. The TCL Group imports into the United States, and manufactures, sells, and/or offers for sale in the United States, TCL LED televisions that incorporate LED devices that, insofar as relevant to the limitations of the asserted claims, have the same features and are manufactured by the same process as the Everlight LED products that were held to infringe the '250 Patent in the Everlight Litigation. By way of example only, the TCL 55FS3700 55-inch 1080p Roku Smart LED TV contains LED devices that, insofar as relevant to the claim limitations and as is apparent from their structure, have the same features and are manufactured by the same process as, for example, Everlight's XI3030 series products that were held in the Everlight Litigation to infringe claims 1, 7, 17 and 21 of the '250 Patent.

25. Specifically, the LED devices in the Accused LED Televisions have the same features as Everlight's XI3030 series products that were found in the Everlight Litigation to infringe claim 17 of the '250 Patent insofar as those features are relevant with respect to the claim elements. The LED devices found in the Accused LED Televisions are light emitting devices that include a resin package comprising a resin part and at least one lead. In addition, the LED devices found in the Accused LED Televisions include an outer surface of the resin part and an outer surface of the at least one lead that are planar at an outer surface of the resin package. The LED devices in the Accused LED Televisions also include a plating disposed on an upper surface and a lower surface of the at least one lead, and an outer side surface of the at least one lead that is unplated. These LED devices include a portion of the resin part disposed over a portion of the plating on the upper surface of the at least one lead. The LED devices in the Accused LED Televisions also include the element of claim 21 of the '250 patent – *viz.*, at least one of the leads comprises two or more different levels.

26. In addition, the LED devices in the Accused LED Televisions, as is apparent from their structure, were manufactured by the same process that insofar as the relevant claim limitations are concerned, was found to infringe claim 1 of the '250 Patent in the Everlight Litigation. The process used to make the LED devices in the Accused LED Televisions is a method of manufacturing a light emitting device. This method includes the step of providing a lead frame comprising at least one notch and the step of plating the lead frame. The process used to make the LED devices found in the Accused LED Televisions further includes the step of, after plating the lead frame, providing an upper mold on a first surface of the plated lead frame and a lower mold on a second surface of the plated lead frame, and transfer-molding a thermosetting resin containing a light reflecting material in a space between the upper mold and the lower mold to form a resin-molded body. The process also includes the step of cutting the resin-molded body and the plated lead frame along the at least one notch to form a resin package, the resin package comprising a resin part and at least one lead, and the cutting step being performed such that an outer surface of the resin part and an outer surface of the at least one lead are planar at an outer side surface of the resin package, wherein the plated lead frame is cut so as to form an unplated outer side surface on the lead. As is apparent from their structure, the process by which the LED devices in the Accused LED Televisions are manufactured also includes the step specified in claim 7 of the '250 Patent – *viz.*, providing a light emitting element in a concave portion of the resin package, wherein the transfer-molding step forms a plurality of concave portions corresponding to the convex portions of the upper mold, each of the concave portions comprising an inner bottom surface at which a portion of lead frame is exposed.

27. The TCL Group, directly and/or through intermediaries and agents, imports into the United States, and manufactures, sells, and/or offers for sale in the United States, including in

this judicial district, televisions, such as the Accused LED Televisions, that incorporate the infringing LED devices.

**COUNT I**  
**(Infringement of U.S. Patent No. 8,530,250)**  
**(35 U.S.C. § 271(a))**

28. Nichia repeats and re-alleges each and every allegation of paragraphs 1-27 as if fully set forth herein.

29. The '250 Patent is valid and enforceable.

30. By their importation into the United States, and manufacture, sale and/or offer for sale in the United States, of televisions that incorporate infringing LED devices, including but not limited to, for example, the 55" LED TV and other Accused LED Televisions, TTE and TCL have been and are now infringing at least claims 17 and 21 of the '250 Patent, in the State of Texas, in this judicial district, and elsewhere, in violation of 35 U.S.C. § 271(a).

31. TTE and TCL's actions are without the consent of Nichia.

32. Nichia has been and will continue to be damaged by TTE and TCL's infringement of the '250 Patent.

33. Nichia and has been and will continue to be irreparably harmed unless TTE and TCL's infringement of the '250 Patent is enjoined.

**COUNT II**  
**(Infringement of U.S. Patent No. 8,530,250)**  
**(35 U.S.C. § 271(g))**

34. Nichia repeats and re-alleges each and every allegation of paragraphs 1-33 as if fully set forth herein.

35. By their importation into the United States, and manufacture, sale and/or offer for sale in the United States, of televisions that incorporate LED devices made by a process patented

in the United States, including but not limited to, for example, the 55” LED TV and other Accused LED Televisions, TTE and TCL have been and are now infringing at least claims 1 and 7 of the ’250 Patent, in the State of Texas, in this judicial district, and elsewhere, in violation of 35 U.S.C. § 271(g).

36. TTE and TCL’s actions are without the consent of Nichia.

37. Nichia has been and will continue to be damaged by TTE and TCL’s infringement of the ’250 Patent.

38. Nichia and has been and will continue to be irreparably harmed unless TTE and TCL’s infringement of the ’250 Patent is enjoined.

#### **JURY DEMAND**

39. Nichia hereby requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff Nichia Corporation prays that the Court enter judgment against Defendants TTE and TCL and in favor of Nichia, as follows:

A. Finding that the ’250 Patent was duly and lawfully issued, and is valid and enforceable.

B. Finding that TTE and TCL have infringed one or more of the claims of the ’250 Patent;

C. Awarding damages to Nichia in accordance with 35 U.S.C. § 284, including pre-judgment and post-judgment interest, to compensate Nichia for TTE and TCL’s infringement of the ’250 Patent;

D. Ordering preliminary and permanent injunctive relief restraining and enjoining TTE and TCL and their officers, agents, attorneys, employees, and those acting in privity or active concert with TTE and TCL, from infringement of the '250 Patent for the full term thereof;

E. Finding that this case is exceptional pursuant to 35 U.S.C. § 285;

F. Awarding Nichia its costs and attorneys' fees; and

G. Awarding Nichia such other and further relief as this Court deems just and proper.

DATED: August 8, 2016

Respectfully submitted,

IRELAND CARROLL & KELLEY

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